

***Remarks***

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1-3, 5-7, 9-10, 13, 15, and 17-24 are pending in the application, with 1 and 24 being the independent claims. Claims 1, 13, and 18-21 are sought to be amended. Claims 4, 12, and 14 are sought to be canceled without prejudice to or disclaimer of the subject matter therein. Applicants reserve the right to prosecute similar or broader claims, with respect to the cancelled and amended claims, in the future. New claims 22-24 are sought to be added. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding rejections and that they be withdrawn.

***Rejection under 35 U.S.C. § 112***

In paragraph 7 of the Office Action, claims 4 and 14 were rejected under 35 U.S.C. § 112, second paragraph, for an alleged lack of antecedent basis for the feature "the CCD array." Without acquiescing to the Examiner's allegation, and merely to expedite prosecution, Applicants have canceled claims 4 and 14 rendering this rejection moot.

***Rejections under 35 U.S.C. § 103*****Independent Claims 1 and 12**

In paragraph 9 of the Office Action, claims 1-3, 5-7, 9, 12-13, 15, 17, and 19-21 were rejected 35 U.S.C. § 103 (a) as allegedly being unpatentable over U.S. Patent No. 6,399,261 to Sandstrom (hereinafter "Sandstrom") in view of U.S. Patent No. 6,014,360

to Yonekubo *et al.* (hereinafter "Yonekubo"). Applicants respectfully traverse this rejection.

Claim 12 has been canceled rendering this rejection moot.

Claim 1 recites features that distinguish over the applied references. For example, claim 1 recites "using a semi-plane knife-edge to block, from one side, a zero order lobe of a pixel diffraction pattern at the apodized pupil."

New claim 24 also recites at least this similar distinguishing feature.

On page 4 of the Office Action, the Examiner explicitly states that Sandstrom does not teach at least this feature of claims 1 and 24. The Examiner then states that Yonekubo, through a disclosure of a hologram pattern 4a and through circular slits in FIGs. 26 and 28, overcomes this deficiency of Sandstrom. Applicants respectfully disagree.

Yonekubo teaches an optical head and an optical recording apparatus which perform a processing, such as recording or regeneration onto or from an optical recording medium, such as a digital video disk (DVD) or a compact disk (CD). (See, Yonekubo, col. 1, lines 1-5). In cols. 22 to 23, and Figures 26 and 28, Yonekubo teaches of uses a mask (e.g., 19 in Figure 28) having rings or circular opening located above detectors 7 in order to limit light received by detectors 7. In a desired embodiment discussed at col. 22, lines 59-64, Yonekubo notes that "[i]n an experiment, the main lobe was shielded gradually from both sides of the optical disk track tangential direction." (Emphasis added). Using a mask having rings or circular openings is different, and a non-trivial difference, from "using a semi-plane knife edge to block, from one side, a zero order lobe. . .," as recited in claims 1 and 24. The recited feature can be used, for example, "such that the knife edge shifts between the current position maximum of the 0th order

lobe of the diffraction pattern in the pupil and the current position of the first zero in the diffraction pattern." (*See*, for example, paragraph [0064] of the instant specification).

Therefore, Sandstrom and Yonekubo, taken alone or in combination do not teach or suggest at least this feature of claims 1 and 24 because they cannot be used to establish a *prima facie* case of obviousness. Accordingly, Applicants respectfully request that this rejection be reconsidered and withdrawn, and that claims 1 and 24, and their dependent claims, be passed to allowance.

**Independent claims 4 and 14**

In paragraph 10 of the Office Action, claims 4 and 14 were rejected under 35 U.S.C. § 103 (a) as allegedly being unpatentable over Sandstrom in view of U.S. Patent No. 6,369,879 to Pederson (hereinafter "Pederson"). Without acquiescing to the Examiner's statements of rejection and to expedite prosecution, Applicants have canceled claims 4 and 14 rendering this rejection moot.

**Dependent claims 10 and 18**

In paragraph 11 of the Office Action, claims 10 and 18 were rejected under 35 U.S.C. § 103 (a) as allegedly being unpatentable over Sandstrom in view of Yonekubo and U.S. Patent No. 5,965,330 to Evans *et al.* (hereinafter "Evans"). Applicants respectfully traverse this rejection.

As discussed above with respect to claims 1 and 24, from which 10 and 18 respectively depend, Sandstrom and Yonekubo fail to teach "using a semi-plane knife-edge to block, from one side, a zero order lobe of a pixel diffraction pattern at the apodized pupil." Evans likewise fails to teach this feature. In the Office Action at page 9, the Examiner states Evans teaches a method for fabricating annular mask having diffraction-reducing edges that includes forms an apodized pupil using one of an

algorithm derived apodization pattern, such that variations are present in at least one of transmittance. [*Sic*]. Thus, Evans is not used to teach or suggest the above-recited feature of claims 1 and 24, nor does Evans teach or suggest this feature. Because claims 10 and 18 include all features of claims 1 and 24, claims 10 and 18 necessarily include this feature. Given that none of the cited art teaches this feature, claims 10 and 18 are not obvious over Sandstrom, Yonekubo, and Evans. Accordingly, Applicants respectfully request that this rejection be reconsidered and withdrawn, and that claims 10 and 18 be passed to allowance at least for the same reasons as independent claims 1 and 24, and further in view of their own distinguishing features.

### ***Conclusion***

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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